

about 8 feet at the mouth, but contracting to about 10 inches near the centre. By casting stones or turf into the shaft so as to stopper the narrow neck, eruptions can be accelerated, and they often exceed in magnitude those of the Great Geyser itself.¹ During quiescence the column of water fills only the lower part of the shaft, its surface usually lying from 9 to 12 feet below the level of the soil. Unlike that of the Great Geyser, it is always in ebullition, and its temperature is subject to comparatively slight differences. On the 8th of July 1847 Bunsen found the temperature at the bottom 112.9° C.; at 3 metres from the bottom, 111.4°; and at 6 metres, 108°; the whole depth of water was on that occasion 10.15 metres. On the 6th, at 2.90 metres from the bottom, it was 114.2°; and at 6.20 metres, 109.3°. On the 10th, at 0.35 metres from the bottom, the reading gave 113.9°; at 4.65 metres, 113.7°; and at 8.85 metres, 99.9°.

The great geyser-district of New Zealand is situated in the south of the province of Auckland in or near the upper basin of the Waikato river to the N.E. of Lake Taupo. In many respects the scene presented in various parts of the districts is far more striking and beautiful than anything of the same kind to be found in Iceland, but this is due not so much to the grandeur of the geysers proper as to the bewildering profusion of boiling springs, steam-jets, and mud-volcanoes, and to the fantastic effects produced on the rocks by the siliceous deposits and by the action of the boiling water. At Whakarewarewa, near Lake Loto Rua, there is a group of eight geysers, one of which, the Waikate, throws the column to a height of 30 or 35 feet (see Hochstetter, *New Zealand*, 1867). But it is in the Yellowstone Park, in the north-west corner of Wyoming, that the various phenomena of the geysers can be observed on the most portentous scale. The geysers themselves are to be counted by hundreds, and the dimensions and activity of several of them render those of Iceland and New Zealand almost insignificant in comparison. The principal groups are situated along the course of that tributary of the Upper Madison which bears the name of Fire Hole River. Many of the individual geysers have very distinctive characteristics in the form and colour of the mound, in the style of the eruption, and in the shape of the column. The "Giantess," as observed by Langford (1870) and Dunraven (1874), lifts the main column to a height of only 50 or 60 feet, but shoots a thin spire to no less than 250 feet. The "Castle" varies in height from 10 or 15 to 250 feet; and on the occasions of greatest effort the noise is appalling, and shakes the ground like an earthquake. Strong distinct pulsations, says Lord Dunraven, occurred at a maximum rate of seventy per minute, having a general tendency to increase gradually in vigour and rapidity until the greatest development of strength was attained, and then sinking again by degrees. The jets grew stronger and stronger at every pulsation for ten or twelve strokes, until the effort would culminate in three impulses of unusual power. The total display lasted about an hour. "Old Faithful" owes its name to the regularity of its action. Its eruptions, which raise the water to a height of 100 or 150 feet, last for about five minutes, and recur every three-quarters of an hour. The "Beehive" sometimes attains a height of 219 feet; and the water, instead of falling back into the basin, is dissipated in spray and vapour. Very various accounts are given of the "Giant." Hayden saw it playing for an hour and twenty minutes, and reaching a height of 140 feet, and Lieutenant Doane says it continued in action for three hours and a half, and had a maximum of 200 feet; but at the earl of

¹ According to Professor Tyndall (see *Royal Institution Notices*, 1853, and *Heat as a Mode of Motion*, 1863), this effect of the stopper is simply due to the fact that it is an impediment to the normally gradual ascent of the heated aqueous strata, and that it is an impediment which at last is suddenly removed.

Dunraven's visit the eruption lasted only a few minutes. For further details see Dunraven's *Great Divide* (1874), and the *Reports* of Professor Hayden.

GEZER (גֶּזֶר), a royal Canaanite city on the boundary of Ephraim in the maritime plain (Josh. xvi. 3-10). It was allotted to the Levites, but its original inhabitants were not driven out until the time of Solomon, when the Egyptians took the city, which was given to Solomon's wife (1 Kings ix. 16). Under the form Gazer it is mentioned as being in the neighbourhood of Emmaus-Nicopolis ('Amwās) and Jamnia (Yebnah) (1 Macc. iv. 15). Throughout the history of the Maccabean wars Gazer plays the part of an important frontier post. It was first taken from the Greeks by Simon the Asmonean (1 Macc. xiv. 7). Josephus also mentions that the city was "naturally strong" (*Antiq.*, viii. 6, 1). The position of Gezer is defined by Jerome (*Onomasticon*, s.v.) as 4 Roman miles north (contra septentrionem) of Nicopolis ('Amwās). This points to the ruined site called *Tell Jezzer*, near the village of Abu Shūsheh, about 4 miles north-west of 'Amwās. The site is naturally very strong, the town standing on an isolated hill, commanding the western road to Jerusalem just where it begins to enter the mountains of Judah. The name Gezer (from a root signifying "insulated") was no doubt derived from the position of the place. The ruins include rock-cut tombs, wine-presses, caves, and quarries, with foundations of a citadel on the hill top. A very fine spring ('Ain Yerdeh) exists on the east, and in 1874 a curious discovery was made on the hill side near the spring. The words Tahum Gezer, "boundary of Gezer," were found cut in Hebrew letters on the live rock in two places, and in each case the Greek name Alkios occurred with them. The genuineness of this curious inscription has not been disputed.

GFRÖRER, AUGUST FRIEDRICH (1803-1861), historian, was born at Calw, Württemberg, on the 5th of March 1803, and at the close of his preliminary studies at the seminary of Blaubeuren, entered the university of Tübingen in 1821 as a student of evangelical theology. After passing his final examinations in 1825, he spent a year in Switzerland, during part of which time he acted as companion and secretary to Bonstetten; the year 1827 was spent chiefly in Rome. Returning to Württemberg in 1828, he first undertook the duties of repetent or theological tutor in Tübingen and afterwards accepted a curacy in Stuttgart; but having in 1830 received an appointment in the royal public library at Stuttgart, he thenceforth gave himself exclusively to literature and historical science. His first work on Philo (*Philo u. die jüdisch-alexandrinische Theosophie*, 1831) was rapidly followed by an elaborate biography, in two volumes, of Gustavus Adolphus (*Gustav Adolf, König von Schweden*, 1835-37), and by a critical history of primitive Christianity (*Kritische Geschichte des Urchristenthums*, 1838), in three volumes, consisting of three parts, entitled respectively "The Century of Salvation" (*Jahrhundert des Heils*), "Sacred Legend" (*Die heilige Sage*), and "Truth" (*Die Wahrheit*). In both of the last-named works, Gfrörer had manifested opinions unfavourable to Protestantism, which, however, were not openly avowed until fully developed in his church history (*Allgemeine Kirchengeschichte bis Beginn des 14ten Jahrhunderts*, 1841-46). In the autumn of 1846 he was appointed to the chair of history in the university of Freiburg, where he continued to teach until his death, which took place at Carlsbad on the 10th of July 1861. In 1848 he sat as a representative in the Frankfort parliament, where he supported the "High German" party, and in 1853 he publicly went over to the Church of Rome, influenced, however, in this, it is said, more by regard for what he conceived to be its political value, than by any purely religious consideration. Among his later works the most important is the *Geschichte der ost- u. westfränkischen*

Karolinger (1858); but those on the pseudo-Isidorian Decretals (*Untersuchung über Alter, Ursprung, u. Werth der Decretalen des falschen Isidorus*, 1848), on the primitive history of mankind (*Urgeschichte des menschlichen Geschlechts*, 1855), on Hildebrand (*Papst Gregor VII. u. sein Zeitalter*, 1859-61), on the history of the 18th century (*Geschichte des 18ten Jahrhunderts*, 1862-73), on German popular rights (*Zur Geschichte deutscher Volksrechte*, 1866), and on Byzantine history (*Byzantinische Geschichte*, 1872-74), are also works of real value. The fruit of much original research, they convey a great quantity of fresh information, and are unusually rich in suggestion; their chief fault may be said to lie in an excess of ingenuity, which leads their author to imagine combinations which never existed, and to invent the most recondite causes for historical occurrences, the explanation of which is rather to be sought in the region of the obvious.

GHÁTS, or GHÁUTS (literally "the Landing Stairs" from the sea, or "Passes"), two ranges of mountains extending along the eastern and western shores of the Indian peninsula. The *Eastern Gháts* run in fragmentary spurs and ranges down the Madras coast. They commence in the Orissa district of Balasor, pass southwards through Cuttack and Puri, enter the Madras presidency in Ganjam, and sweep southwards through the districts of Vizagapatam, Godávári, Nellore, Chengalpat, South Arcot, Trichinopoly, and Tinnevely. They run at a distance of from 50 to 150 miles from the coast, except in Ganjam and Vizagapatam, where in places they almost abut on the Bay of Bengal. Their geological formation is granite, with gneiss and mica slate, with clay slate, hornblende, and primitive limestone overlying. The average elevation is about 1500 feet, but several hills in Ganjam are between 4000 and 5000 feet. The *Western Gháts* start from the north of the Tápti valley, and run south through Khándesh, Násik, Tanna, Satara, Ratnagiri, Kanara, and Malabar, and the states of Cochin and Travancore, meeting the Eastern Gháts at an angle near Cape Comorin. The range of the Western Gháts extends uninterruptedly, with the exception of a gap or valley 20 miles across known as the Palghát gap. The length of the range is 800 miles from the Tápti to the Palghát gap, and south of this about 200 miles to the extreme south of the peninsula. In many parts there is only a narrow low strip of coast between the hills and the shore; at one point they rise in magnificent precipices and headlands out of the ocean. The average elevation is 3000 feet, precipitous on the western side facing the sea, but with a more gradual slope on the east to the plains below. The highest peaks in the northern section are Mahábaleswar, where is the summer capital of the Government of Bombay, 4700 feet; Purandhar, 4472; and Sinhgarh, 4162 feet. South of Mahábaleswar the elevation diminishes to about 1000 feet above sea-level. Further south the elevation again increases, and attains its maximum towards Coorg, where the highest peaks vary from 5500 to 7000 feet, and where the main range joins the interior Nilgiri hills. South of the Palghát gap, the peaks of the Western Gháts rise as high as 7000 feet. The geological formation is trap in the northern and laterite in southern section.

GHÁZIABÁD, a town in Meerut district, North-Western Provinces of India, distant 12 miles from Delhi and 28 miles from Meerut, in 28° 39' 55" N. lat., 77° 28' 10" E. long. The town was founded in 1740 by Gházi-ud-dín, brother of Nawáb Salábat Jang, ruler of the Deccan, and takes its name from its founder. It has considerably risen in importance of late years, from having been selected as the point of junction of the East Indian, and the Sind, Punjab, and Delhi railways. A branch into Delhi city diverges from Gháziábád. Population (1872) 7365.

GHÁZÍPÚR, a district of British India, in the lieutenant-governorship of the North-Western Provinces, and included in the Benares division. It is bounded on the N. by Azimgarh and Sárán, E. by Sárán, S. by Sháhábád, and W. by Benares and Jaunpur. Gházípur forms part of the great alluvial plain of the Ganges, which divides it into two unequal portions. The northern subdivision lies between the Gumti and the Gográ, whose confluences with the main stream mark its eastern and western limits respectively. The southern tract is a much smaller strip of country, enclosed between the Karamnása and the great river itself. No hill or natural eminence is to be found in the district. A few lakes are scattered here and there, formed where the rivers have deserted their ancient channels. The largest is that of Suráha, once a northern bend of the Ganges, but now an almost isolated sheet of water, 5 miles long by about 4 broad.

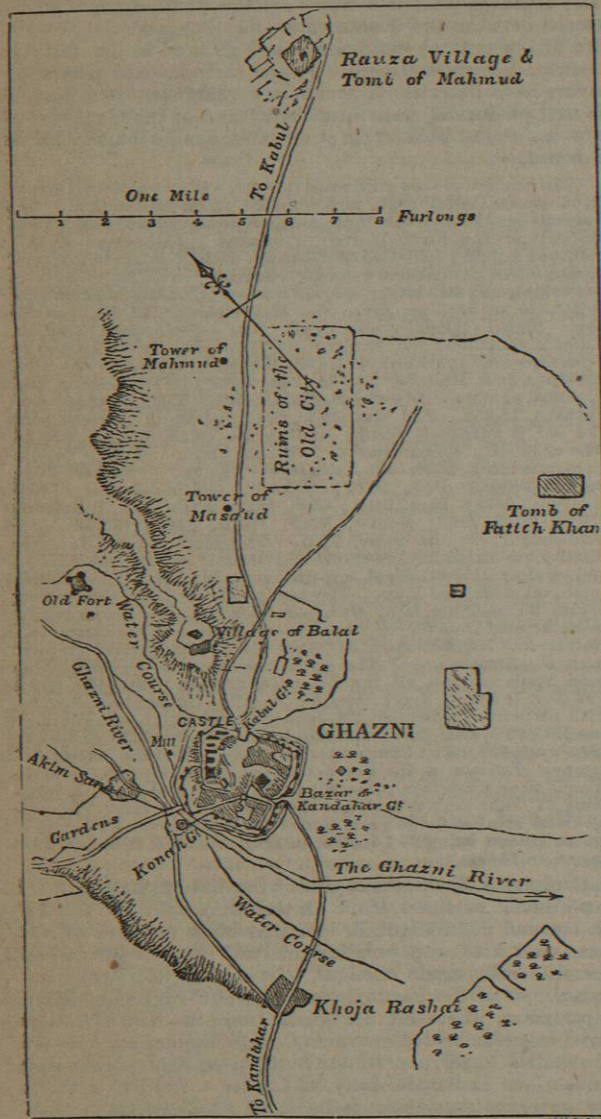
Gházípur is a closely cultivated district, and out of a total area of 2168 square miles 1546 are actually under cultivation. The harvests are the same as those common to the whole of the plain districts of the North-Western Provinces. The census of 1872 returned a total population in Gházípur district of 1,345,570 souls (males 696,572, females 648,829), dwelling in 3725 villages or townships, and inhabiting 285,007 houses. The Hindus numbered 1,221,810, or 90.7 per cent., and Mahometans, 123,455. Of the three higher Hindu castes there were—Bráhmans, 123,012; Rajputs, 295,355; and Baniyas, 49,538. The lower castes are represented by the Ahirs, 171,216; Chámáras, 122,075; Káyasths, 22,480; and Kurmis, 18,136. Amongst the Mussulmans, the Shaikhs numbered 26,940; Sayyids, 4525; Mughals, 570; and Patháns, 18,452. The district is rich, and in the eastern parts the soil is extremely fertile, so that the cultivators are, on the whole, in easy circumstances. Sixteen towns contain a population exceeding 5000, viz., Gházípur, 38,853; Mahatwar Khás, 8975; Shiupur Diar, 9279; Gahmar, 9050; Sherpur, 7958; Riotipur, 9323; Bára, 5424; Chit, 5821; Narhi, 5527; Bansdih, 7319; Ríoti, 7700; Maniar, 5285; Ballia, 8521; Bairaia, 5589; Sonbarsa, 7162; and Rasra, 7261. The chief imports into the district are English piece goods and thread, cotton, salt, spices, and grain; the principal exports, country cloth, sugar, fuller's earth, oil seeds, and hides. The headquarters of the Government opium manufacture is at Gházípur town. Carbonate of soda is manufactured from the *rich* or saline efflorescence of the barren *usar* plains, and largely exported. Saltpetre is also largely prepared from the same source. The great trade route is the Ganges, but good roads connect all the principal centres with each other. The East Indian Railway runs for 24 miles through the district, with stations at Zamániah, Dildarnagar, and Gahmar. The total amount of imperial, local, and municipal revenue of the district in 1876 was £200,000. Gházípur is said to be one of the hottest and dampest districts in the North-Western Provinces. In 1869 the annual mean temperature was 80° Fahr., the lowest monthly mean being 61° Fahr., in January, and the highest 98° in May. The average total rainfall for 11 years from 1860 to 1871 was 40.1 inches, the maximum being 50.5 inches, in 1861, and the minimum 21.5 inches, in 1868.

GHÁZÍPÚR TOWN, the capital of the district, stands on the low alluvial northern bank of the Ganges, in 35° 23' 36" N. lat. and 83° 35' 13" E. long., covering an area of 416 acres, and with a population in 1872 of 38,853. There is considerable trade in sugar, tobacco, long cloth, and rose water. It is the headquarters of the Government opium department, where all the opium from the North-Western Provinces is collected and manufactured under a monopoly. A metalled road runs from Gházípur to Zamániah station on the East Indian Railway, 13½ miles. Lord Cornwallis, the governor-general of India, died at Gházípur in 1805, and a monument and marble statue are erected over his grave.

GHÁZNI (called in European books often Ghaznah, Gazna, Ghizni, or Ghuznee, in the Oriental histories more generally Ghaznín), a famous city in Afghanistan, the seat of an extensive empire under two different mediæval dynasties, and again of prominent interest in the modern history of British India. Ghazni stands on the high tableland of central Afghanistan, in 68° 20' E. long., 33° 34' N. lat., at a height of 7726 feet above the sea, and on the direct road between Kandahar and Cabul, 233 miles by

road N.E. from the first, and 85 miles S.W. from the second. It also stands at the head of the Gomal route from the Indus, one much followed by trade.

Ghazni, as it now exists, is a place in decay, and probably does not contain more than 4000 inhabitants. It stands at the base of the terminal spur of a ridge of hills, an offshoot from the Gul-Koh, which forms the watershed between the Arghandáb and Tarnak rivers (see *AFGHANISTAN*). The castle stands at the northern angle of the town next the



Sketch of Ghazni and its Environs.

hills, and is about 150 feet above the plain. The town walls stand on an elevation, partly artificial, and form an irregular square, close on a mile in circuit (including the castle), the walls being partly of stone or brick laid in mud, and partly of clay built in courses. They are flanked by numerous towers. There is also a loopholed fausse-braye wall, and a ditch which can be filled (partially at least) from the Ghazni river, which flows close to the west of the

town. There are three gates. The town consists of dirty and very irregular streets of houses several stories high, but with two straighter streets of more pretension, crossing near the middle of the town. New fortifications had been erected previous to 1857, but their present state is not known. In 1839 they were of no real power to resist artillery of moderate calibre, though imposing in aspect and highly picturesque, judging from the views given by Sir Keith Jackson and others. Of the strategical importance of Ghazni there can hardly be a question. The view to the south is extensive, and the plain in the direction of Kandahar stretches to the horizon. It is bare except in the vicinity of the river, where villages and gardens are tolerably numerous. Abundant crops of wheat and barley are grown, as well as of madder, besides minor products. The climate is notoriously cold,—snow lying two or three feet deep for about three months, and tradition speaks of the city as having been more than once overwhelmed by snow-drift. Fuel is scarce, consisting chiefly of prickly shrubs. In summer the heat is not like that of Kandahar or Cabul, but the radiation from the bare heights renders the nights oppressive, and constant dust-storms occur. It is evident that the present restricted walls cannot have contained the vaunted city of Mahmud. Probably the existing site formed the citadel only of his city. The remarks of Ibn Batuta (c. 1332) already suggest the present state of things, viz., a small town occupied, a large space of ruin; for a considerable area to the N.E. is covered with ruins, or rather with a vast extent of shapeless mounds, which are pointed out as Old Ghazni. The only remains retaining architectural character are two remarkable towers, rising to the height of about 140 feet, and some 400 yards apart from each other. They are similar, but whether identical, in design, is not clearly recorded. They belong, on a smaller and far less elaborate scale, to the same class as the Kutb Minar at Delhi. Views of one of the minarets will be found in Fergusson's *Indian Architecture*, in Vigne's *Visit to Ghazni, Cabul, &c.*, in Atkinson's *Sketches in Afghanistan*, and other works. Arabic inscriptions in Cufic characters show the most northerly to have been the work of Mahmud himself, the other that of his son Mas'ud. On the Cabul road, a mile beyond the Minaret of Mahmud, is a village called Rauzah ("the Garden," a term often applied to garden-mausoleums). Here, in a poor garden, stands the tomb of the famous conqueror himself. It is a prism of white marble standing on a plinth of the same, and bearing a Cufic inscription praying the mercy of God on the most noble Amir, the great king, the Lord of church and state, Abul Kásim Mahmud, son of Sabuktigin. The tomb stands in a rude chamber, covered with a dome of clay, and hung with old shawls, ostrich eggs, tiger-skins, and so forth. The village stands among luxuriant gardens and orchards, watered by a copious aqueduct. Sultan Baber celebrates the excellence of the grapes of Rauzah.

The famous "Gates of Somnath" (so-styled) were attached to the building covering Mahmud's tomb until their removal to India, under Lord Ellenborough's orders, on the evacuation of the country in 1842. The governor-general's intention, as announced in a famous prose pæan addressed to the Hindu princes, was to have carried them solemnly through Upper and Central India to Guzerat, and there to have restored them to the (long-desecrated) temple. Calmer reflexion prevailed, and the gates were consigned to the arsenal at Agra, where they now remain. These gates (11 feet in height, 9½ in width) are ascertained to be of Himalayan cedar (deodar), and are richly carved in geometric Saracenic patterns, so that there is no likelihood of any real connexion with Somnath. But tradition did ascribe to them such a connexion. And when Sháh Shúja in 1831 treated with Mahárája Ranjit

Singh for aid to recover the throne of Cabul, one of Ranjit's stipulations was the restoration of the gates to Somnath, a circumstance which probably suggested the notion to the eccentric governor-general. A still more remarkable fact (stated in a report by Capt. Claude Wade, dated 21st Nov. 1831) is that the sháh reminded the mahárája of a prophecy that foreboded the downfall of the Sikh dominion on the removal of the Ghazni gates. The gates were removed to India in the end of 1842; and the Sikh kingdom practically collapsed with the death of Sher Singh in September 1843. Another relic of Sultan Mahmud is the *Band-i-Sultan*, a great dam on the Ghazni river, some 12 miles above the city. Baber describes it as 80 or 100 feet in height, probably along the slope, and about 600 feet long. It had lain ruined in his time since its destruction by Aláuddin Jahánsoz, but Baber sent money to restore it. Vigne calls it only 25 feet in height. He found it much out of repair. It supplies irrigation to the plain west of Ghazni.

There are many holy shrines about Ghazni surrounded by orchards and vineyards. Baber speaks of them, and tells how he detected and put a stop to the imposture of a pretended miracle at one of them. These sanctuaries make Ghazni a place of Moslem pilgrimage, and it is said that at Constantinople much respect is paid to those who have worshipped at the tomb of the great Gházi. To test the genuineness of the boast, professed pilgrims are called on to describe the chief *notabilia* of the place, and are expected to name all those detailed in certain current Persian verses.

The city is not mentioned by any narrator of Alexander's expedition, nor by any ancient author so as to admit of positive recognition. But it is very possibly the *Gazaca* which Ptolemy places among the *Paropamisadae*, and this may not be inconsistent with Sir H. Rawlinson's identification of it with *Gazos*, an Indian city spoken of by two obscure Greek poets as an impregnable place of war. The name is probably connected with the Persian and Sanskrit *ganj* and *ganja*, a treasury (whence the Greek and Latin *Gaza*). We seem to have positive evidence of the existence of the city before the Mahometan times (644) in the travels of the Chinese pilgrim; Hwen Thsang, who speaks of *Ho-si-na* (i.e., probably *Ghazni*) as one of the capitals of *Tsarukuta* or Arachosia, a place of great strength. In early Mahometan times the country adjoining Ghazni was called *Zábul*. When the Mahometans first invaded that region Ghazni was a wealthy entrepôt of the Indian trade. Of the extent of this trade some idea is given by Ibn Haukal, who states that at Cabul, then a mart of the same trade, there was sold yearly indigo to the value of two million dinárs (£1,000,000). The enterprise of Islám underwent several ebbs and flows over this region. The provinces on the Helmand and about Ghazni were invaded as early as the caliphate of Mo'awia (662-680). The arms of Ya'kub Leis swept over Cabul and Arachosia (Al-Rukháj) about 871, and the people of the latter country were forcibly converted. Though the Hindu dynasty of Cabul held a part of the valley of Cabul river till the time of Mahmud, it is probably to the period just mentioned that we must refer the permanent Mahometan occupation of Ghazni. Indeed, the building of the fort and city is ascribed by a Mahometan historian to Amrú Leis, the brother and successor of Ya'kub (d. 901), though the facts already stated discredit this. In the latter part of the 9th century the family of the Samáni, sprung from Samarkand, reigned in splendour at Bokhara. Alptigin, originally a Turkish slave, and high in the service of the dynasty, about the middle of the 10th century, losing the favour of the court, wrested Ghazni from its chief (who is styled Abú Bakr Lawik, wáli of Ghazni), and established himself there. His government was recognized from Bokhara, and held till his death. In 977 another Turk slave, Sabuktigin, who had married the daughter of his master Alptigin, obtained rule in Ghazni. He made himself lord of nearly all the present territory of Afghanistan and of the Punjab. In 997 Mahmud, son of Sabuktigin, succeeded to the government, and with his name Ghazni and the Ghaznevid dynasty have become perpetually associated. Issuing forth year after year from that capital, Mahmud carried fully seventeen expeditions of devastation through northern India and Guzerat, as well as others to the north and west. From the borders of Kurdistan to Samarkand, from the Caspian to the Ganges, his authority was acknowledged. The wealth brought back to Ghazni was enormous, and contemporary historians give glowing descriptions of the magnificence of the capital, as well as of the conqueror's munificent support of literature. Mahmud died in 1030, and some fourteen kings of his house came after him; but though there was some revival of importance under Ibrahim (1059-1099),

the empire never reached anything like the same splendour and power. It was overshadowed by the Seljuks of Persia, and by the rising rivalry of Ghur (q. v.), the hostility of which it had repeatedly provoked. Bahram Sháh (1118-1152), put to death Kutubuddin, one of the princes of Ghur, called king of the Jibál or Hill country, who had withdrawn to Ghazni. This prince's brother, Saifuddin Súri, came to take vengeance, and drove out Bahram. But the latter recapturing the place (1149) paraded Saifuddin and his vizier ignominiously about the city, and then hanged them on the bridge. Alá-uddin of Ghur, younger brother of the two slain princes, then gathered a great host, and came against Bahram, who met him on the Helmand. The Ghuri prince, after repeated victories, stormed Ghazni, and gave it over to fire and sword. The dead kings of the house of Mahmud, except the conqueror himself and two others, were torn from their graves and burnt, whilst the bodies of the princes of Ghur were solemnly disinterred and carried to the distant tombs of their ancestors. It seems certain that Ghazni never recovered the splendour that perished then (1152). Alá-uddin, who from this deed became known in history as *Jahán-soz* (*Brilliant-monde*), returned to Ghur, and Bahram recaptured Ghazni; he died in 1157. In the time of his son Khusru Sháh, Ghazni was taken by the Turkish tribes called Ghuzz (generally believed to have been what are now called Turkomans). The king fled to Lahore, and the dynasty ended with his son. In 1173 the Ghuzz were expelled by Ghiyásuddin Sultan of Ghur (nephew of Alá-uddin Jahánsoz), who made Ghazni over to his brother Muizuddin. This famous prince whom the later historians call, it is not clear why, *Shaháb-uddin* Ghúri, shortly afterwards (1174-5) invaded India, taking Multán and Uchh. This was the first of many successive inroads on western and northern India, in one of which Lahore was wrested from Khusru Malik, the last of Mahmud's house, who died a captive in the hills of Ghur. In 1192 Prithvi Rái or Pithora (as the Moslem writers call him) the Chohan king of Ajmir, being defeated and slain near Thanesar, the whole country from the Himalaya to Ajmir became subject to the Ghuri king of Ghazni. On the death of his brother Ghiyásuddin, with whose power he had been constantly associated, and of whose conquests he had been the chief instrument, Muizuddin became sole sovereign over Ghur and Ghazni, and the latter place was then again for a brief period the seat of an empire nearly as extensive as that of Mahmud the son of Sabuktigin. Muizuddin crossed the Indus once more to put down a rebellion of the Khokars in the Punjab, and on his way back was murdered by a band of them, or, as some say, by one of the *Muláhidah* or Assassins. The slave lieutenants of Muizuddin carried on the conquest of India, and as the rapidly succeeding events broke their dependence on any master, they established at Delhi that monarchy of which, after it had endured through many dynasties, and had culminated with the Moghul house of Baber, the shadow perished in 1857. The death of Muizuddin was followed by struggle and anarchy, ending for a time in the annexation of Ghazni to the empire of Khwarazm by Mahommed Sháh, who conferred it on his famous son, Jaláuddin, and Ghazni became the headquarters of the latter. After Jenghiz Khan had extinguished the power of his family in Turkestan, Jaláuddin defeated the army sent against him by the Mongol at Parwán, north of Cabul. Jenghiz then advanced and drove Jaláuddin across the Indus, after which he sent Okkodai his son to besiege Ghazni. Henceforward Ghazni is much less prominent in Asiatic history. It continued subject to the Mongols, sometimes to the house of Hulákú in Persia, and sometimes to that of Chaghatai in Turkestan. In 1326, after a battle between Amir Husain, the viceroy of the former house in Khorasan, and Tarmashirin, the reigning khan of Chaghatai, the former entered Ghazni and once more subjected it to devastation, and this time the tomb of Mahmud to desecration. The statement in a recent book on Afghanistan, that a new Ghori dynasty reigned at Ghazni from 1336 to 1383, is erroneous.

Ibn Batuta (c. 1332) says the greater part of the city was in ruins, and only a small part continued to be a town. Timur seems never to have visited Ghazni, but we find him in 1401 bestowing the government of Cabul, Kandahar, and Ghazni on Pir Mahommed, the son of his son Jahángir. In the end of the century it was still in the hands of a descendant of Timur, Ulugh Beg Mirza, who was king of Cabul and Ghazni. The illustrious nephew of this prince, Baber, got peaceful possession of both cities in 1504, and has left notes on both in his own inimitable Memoirs. His account of Ghazni indicates how far it had now fallen. "It is," he says, "but a poor mean place, and I have always wondered how its princes, who possessed also Hindustan and Khorasan could have chosen such a wretched country for the seat of their government, in preference to Khorasan." He commends the fruit of its gardens, which still contribute largely to the markets of Cabul. Ghazni remained in the hands of Baber's descendants, reigning at Delhi and Agra, till the invasion of Nadir Shah (1738), and became after Nadir's death a part of the new kingdom of the Afghans under Ahmed Sháh Durráni. We know of but two modern travellers who have recorded visits to the place previous to the war of 1839. George Forster passed as a disguised traveller with a kafila in 1783. "Its slender existence," he says, "is now main-

tained by some Hindu families, who support a small traffic, and supply the wants of the few Mahometan residents." Mr Vigne visited it in 1836, having reached it from Multan with a caravan of Lohani merchants, travelling by the Gomal pass. The historical name of Ghazni was brought back from the dead, as it were, by the news of its capture by the British army under Sir John Keane, 23d July 1839. The siege artillery had been left behind at Kandahar; esalade was judged impracticable; but the project of the commanding engineer, Captain George Thomson, for blowing in the Cabul gate with powder in bags, was adopted, and carried out successfully, at the cost of 182 killed and wounded. Two years and a half later, the Afghan outbreak against the British occupation found Ghazni garrisoned by a Bengal regiment of sepoy, but neither repaired nor provisioned. They held out under great hardships from 16th December 1841 to 6th March 1842, when they surrendered. In the autumn of the same year General Nott, advancing from Kandahar upon Cabul, reoccupied Ghazni, destroyed the defences of the castle and part of the town, and carried away the famous gates. Since then Ghazni has not been entered by any Englishman; for when Colonel Lumsden's mission passed this way in 1857 they were not allowed to approach the place.

See Elliot, *Hist. of India*, ed. by Dowson; *Tubakati-i-Nasiri*, translated by Major Ravery in the *Bibliotheca Indica*; E. Thomas, in *J. R. As. Soc.*, vols. ix. and xvii.; *Forster's Journey*; *Vigne's Visit to Ghazni*, &c.; *Masson's Travels*; Reports of Lumsden's Mission in 1857; *Journal of the As. Soc.*, vol. xii.; *Autobiography of Baber*, by Leyden and Erskine; *Cunningham's Hist. of the Sikhs*, &c. (H. Y.)

GHEE (Sanskrit, *Ghrita*), a kind of clarified butter made in the East. The best is prepared from butter of the milk of cows, the less esteemed from that of buffaloes. The butter is melted over a slow fire, and set aside to cool; the thick, opaque, whitish, and more fluid portion, or ghee, representing the greater bulk of the butter, is then removed. The less liquid residue, mixed with groundnut oil, is sold as an inferior kind of ghee. It may be obtained also, according to the *Indian Domestic Economy and Receipt Book*, p. 16, 6th ed., 1865, by boiling butter over a clear fire, skimming it the while, and, when all the water has evaporated, straining it through a cloth. Ghee which is rancid or tainted, as is often that of the Indian bazaars, is said to be rendered sweet by boiling with leaves of the *Moringa pterygosperma* or horse-radish tree. In India ghee is one of the commonest articles of diet, and indeed enters into the composition of everything eaten by the Brahmans. It is also extensively used in Indian religious ceremonies, being offered as a sacrifice to idols, which are at times bathed in it. Sanskrit treatises on therapeutics describe ghee as cooling, emollient, and stomachic, as capable of increasing the mental powers, and of improving the voice and personal appearance, and as useful in eye-diseases, tympanitis, painful dyspepsia, wounds, ulcers, and other affections. Old ghee is in special repute among the Hindus as a medicinal agent, and its efficacy as an external application is believed by them to increase with its age. Ghee more than 10 years old, the *purana ghrita* of Sanskrit materia medica, has a strong odour, and the colour of lac. Some specimens which have been much longer preserved—and "clarified butter a hundred years old is often heard of"—have an earthy look, and are quite dry and hard, and nearly inodorous. Medicated ghee (Sanskrit, *ghrita paka*) is made by warming ordinary ghee to remove contained water, melting, after the addition of a little turmeric juice, in a metal pan at a gentle heat, and then boiling with the prepared drugs till all moisture is expelled, and straining through a cloth.

See Uday Chand Dut, *The Materia Medica of the Hindus*, compiled from Sanskrit Medical Works, Calcutta, 1877, and, on the uses of ghee in culinary operations, the above quoted *Receipt Book*, and *The Indian Cookery Book*, Calcutta (1869 f).

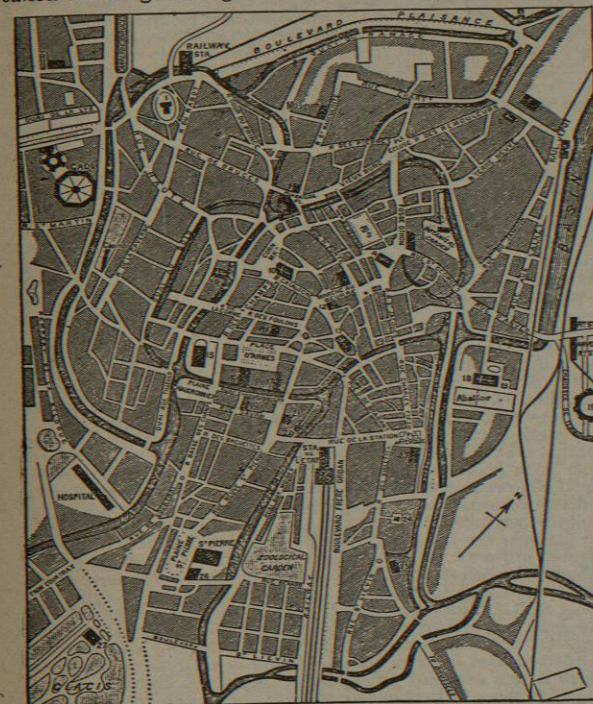
GHEEL, or GEEL, a town of Belgium, in the province of Antwerp, about 25 miles E. of Antwerp, on the railway between Herenthals and Moll, with a population, according to the census of 1876, of 10,265. Situated in the midst of that half barren stretch of moorland which is known as the Campine or Kampenland, it would have been of little importance, in spite of its manufactures of cloth, leather, wooden shoes, and wax-lights, had it not for long centuries been the seat of a unique method of dealing with the insane.

A local legend, tracing the origin of the town back to a chapel of St Martin erected in the 7th century, goes on to tell how an Irish princess, fearing the fate that long afterwards befel Beatrice Cenci, sought refuge in this remote asylum, but was pursued by her relentless father and put to death, along with a priest Gerrebert, the companion of her flight. The tomb of the victims was soon discovered to have a healing virtue for minds diseased; the sainted Dymphna became the patroness of the insane; and a large and beautiful church in her honour was erected on the site of St Martin's chapel. Commenced in the 12th century, it was finished in 1340, and consecrated by the bishop of Cambrai; and the pilgrimages to the tomb were sanctioned by a brief of Eugenius IV. In 1538 Jean de Mérode, within whose domains the church was situated, instituted a vicariate of nine priests and a director, and in 1562 Henri de Mérode transformed the vicariate into a regular chapter of nine canons and a dean. The church still remains to bear witness to the importance formerly attached to the shrine; and though the tomb of St Dymphna has long been a cenotaph, a few stray enthusiasts still pass beneath it in hopeful imitation of the thousands in bygone years, whose knees have worn deep furrows in the pavement as they made their ninefold transits on nine successive days. As food and lodging had to be provided for the patients who were brought to the saint, the inhabitants of Gheel grew accustomed to the treatment of the various kinds of mental alienation, and gradually discovered that forcible measures were much less frequently necessary, and danger less likely to result from free intercourse with the insane, than was generally believed throughout Europe. When M. Pontecoulant was appointed by Napoleon prefect of the Revolution department of the Dyle, his attention was called to the success of the domestic régime in force at Gheel, in contrast to the sad condition of affairs in the asylum at Brussels, and he caused the patients to be removed from the capital to the little country town. His example was freely followed by the authorities of different districts, and Gheel received full official recognition. Investigations undertaken about 1850 by M. Ducpétiaux, inspector-general of benevolent establishments in Belgium, resulted in the reform of such abuses as had crept into the system; and the relations of the patient and his protectors were placed on a strict legal footing by the law of 1st May 1851. Further ameliorations have been introduced in 1852, 1857, 1858, &c. The whole management of the system is under the supervision of officially appointed physicians, and the advantages of a regular establishment are thus combined with those of domestic comfort, social freedom, and activity. Permission to receive patients is granted not only to the town residents, but also to the villagers of the vicinity.

Among the numerous works and papers descriptive of Gheel and its régime, the following may be mentioned:—Gazot, *Hist. ecclésiastique des Pays Bas*, 1614; Biffi, "Memorie originali," in *Gazetta medica Italiana*, 2d Oct. 1854; Brown, in *Asylum Journal*, 1858; Bucknill, *Ibid.*, 1858, 1859; Bulckens, *Rapport*, &c., Brussels, 1857; papers by Auguste Droste, in *Allg. Zeitsch. für Psychiatrie*, 1853, *Corr. Blätter der Deutschen Ges. für Psychiatrie*, 1856, *Hygea*, 1857, and *Deutsche Klinik*, 1858; Esquirol, *Mal. mentales*, vol. ii.; Jules Duval, *Gheel, ou Une colonie d'aliénés*, Paris, 1860; Ruedy, *Gheel, Beitrag zur Gesch. der prakt. Psychiatrie*, Berlin, 1875.

GHEENT, in Low Latin *Ganda* or *Gandavum*, in French *Gand*, in Flemish *Gend*, in German *Gent*, a city of Belgium, at the head of the province of East Flanders, is situated about 30 miles to the west of Antwerp on the Scheldt and the Lys. The two streams branch out to such an extent as to partition the town into 26 islands, which are connected by about 270 bridges, 42 being of stone, and 28 of the others being wooden structures of considerable size. In general Ghent is well built, and, though the older portion has narrow and gloomy lanes, it occupies as a whole a larger area than most European towns in proportion to the popu-

lation and the number of houses. A striking and pleasing feature is the number of promenades, the most noteworthy being the Coupure or "Cutting," so called from the branch of the Bruges canal constructed in 1758. Gardens, orchards, and corn-fields are enclosed within the ancient boundaries of the walls, which extended nearly 8 miles in circumference. An excellent view of the city and its environs is obtained from the belfry of the grand old watch-tower erected by the men of Ghent between 1183 and 1339, from whose summit the voice of the famous bell Roland called the burghers together for fire or fray. The present



- Plan of Ghent.
- | | | |
|--------------------------------|----------------------------|--------------------------|
| 1. Great Béguinage. | 9. Church of St Michel. | 18. Abbey St Bavon. |
| 2. Church of St Sauveur. | 10. Church of St Nicholas. | 19. Béguinage. |
| 3. Library and Royal Athenæum. | 11. Hôtel de Ville. | 20. Church of Ste Barbe. |
| 4. Church of St Jacques. | 12. Watch Tower (Belfry). | 21. Theatre. |
| 5. Statue of Artevelde. | 13. Cathedral of St Bavon. | 22. Gas-Works. |
| 6. Cannon (Dulle Griete). | 14. University. | 23. Church of St Anne. |
| 7. Counts' Castle. | 15. Court-House. | 24. Little Béguinage. |
| 8. Fish Market. | 16. Theatre. | 25, 26, 27. Barracks. |
| | 17. Baths. | |

spire of cast iron dates from 1854, but it is still surmounted by the golden dragon brought to Ghent from the church of St Sophia in Constantinople, not long after the conquest of that city by the crusaders. Roland was removed by Charles V., and its place is now supplied by a chime of 44 bells.

Almost all the houses of the wealthier classes of Ghent are constructed after the Italian fashion, with wide porticochères, spacious courtyards, and lofty staircases; but along the quays and in the older streets there are still numerous specimens of the quaint and grander architecture of the 16th and 17th centuries. The industrial classes live for the most part in long monotonous rows of poor-looking houses. Among the public squares the most noteworthy are the Friday Market (*Marché du Vendredi*), where in former days the counts of Flanders were inaugurated and the trades unions used to assemble; the *Kouter* (the word in Flemish means field), which became the *Place d'Armes* in 1812, and is the favourite rendezvous of the fashionable world; the *Plaine de St Pierre*, especially used for military

reviews; the Corn Market, which is one of the busiest spots in the town; and the *Place Sainte Pharaïde*, which contains the façade of the fish-market and the gate of the Counts' Castle, and is annually the scene of the so-called Fair of the Little Presents (*Presentjesmarkt*). The *Plaine des Recollets*, which takes its name from the convent of the Reformed Franciscans (1225-1796), was in 1836 chosen as the site of the new court-house. Near the Friday Market is an enormous cannon, 18 feet long, 10 feet in girth, and nearly 3 feet wide at the mouth, formed in the same fashion as "Mons Meg" in Edinburgh Castle, and surnamed *Dulle Griete*, or "Mad Meg" or Margaret.

The cathedral of St Bavon (Flem. *Baefs*) ranks as one of the most splendid of the churches of Belgium. Though the original foundation dates from the 9th or 10th century, the crypt and choir of the actual edifice have no higher antiquity than the 13th century, and the other parts were not completed till the 16th. The roof of the nave has been erected since the destructive fire of 1822. Originally dedicated to St John, the church received its present name only in 1540, when Charles V. made it the seat of the collegiate chapel of the abbey of St Bavon; and it was not till 1559 that it was constituted a cathedral at the request of Philip II. of Spain. In its exterior St Bavon's is rather heavy in style, but it is surmounted by a fine octagonal tower, which, before the destruction of the spire by lightning in 1603, had a height of 360 feet, and still reaches 270 feet. The interior is remarkable for the richness and variety of its decorations. The choir and transepts are lined with black marble, and the balustrades are of white or variegated marble. A statue of St Bavon in his dual robes adorns the high altar, and in front are four tall copper candlesticks which belonged to Charles I., and bear the royal arms of England. Beneath the windows of the choir are affixed the arms of the knights of the golden fleece, whose last chapter was held by Philip II. in St Bavon's in 1559. The chapels are twenty-four in number; their gates are of brass, and almost every available spot has its painting or statue. The eleventh is known as the Chapel of the Lamb, as it contains the central and principal portion of the famous Adoration of the Lamb painted by John Van Eyck in 1432. Hubert Van Eyck, his brother and compeer, and Margaret, his sister, lie buried in the crypt. The church of St Nicholas—an early Gothic structure, with a great tower of the 15th century and a modern portico—has the credit of being the oldest in the town; and St Michael's, dating from about 1450, but frequently restored, is memorable as the scene of the worship of reason during the French Revolution. Previous to the Revolution there existed in Ghent a large number of convents and monasteries (thirty-seven establishments of this class, with 1122 inmates, are recorded in 1781); and one of its most famous institutions at the present day is the Béguinage of St Elizabeth, a community of about 600 or 700 nuns, who inhabit a separate quarter of the town, consisting of little brick-built cottages arranged in streets and squares within a common wall.

Among the secular buildings of Ghent one of the finest is the Hôtel de Ville, its northern façade being an exceptionally rich example of flamboyant Gothic of the 15th century, and its eastern façade presenting a curious contrast, with its rows of Doric, Ionic, and Corinthian columns after the style of the Italian Renaissance. The court-house or *palais de justice* is a heavy but imposing structure in the Romanesque manner, erected between 1835 and 1843 by the architect Roelandt at the common expense of the state, the province, and the town. The minor apartments of the lower floor have been all more or less sacrificed to the great Hall of the Lost Footsteps, which is 240 feet long and 70 feet wide. About the same time the same architect was entrusted with the designs for the casino, a building adapted

for the flower-shows of the Botanical Society and the concerts of the choral union of St Cecilia. The so-called Government house, which is partly occupied by the provincial administration and partly by the governor as his residence, was assigned by Charles V. to the provost of St Bavon, became in 1581 the property of William of Orange (the Silent), at a later date served as episcopal palace, and in the time of Napoleon was the prefecture. The present episcopal palace was built in 1845 as an appendage to the cathedral.

With benevolent institutions of various kinds Ghent is abundantly supplied. A lunatic asylum, the Hospital of the Byloque, founded as early as 1225, a maternity hospital dating from 1827, a blind asylum (1854) due to the beneficent bequests of L. Van Caneghem, a deaf and dumb institution (1822), and an *atelier de charité*, or establishment for giving work to the unemployed, which has been in operation since 1817, are worthy of special mention. It would be less of a paradox than might be supposed if the great penitentiary (Rasphuis, or Maison de Force) had been included in the list; for it is remarkable, not only for the sumptuous style of its buildings, but for the philanthropic character of its administration. It was erected between 1772 and 1825 at a cost of 2,150,000 francs, and can accommodate 2600 prisoners.

The spacious university buildings were erected between 1819 and 1826, at the expense of the city, under the auspices of William I., king of Holland. They were designed by Roelandt in the Greek style, and one of the principal features is a portico after the model of the Pantheon at Rome. The university library, containing upwards of 100,000 volumes, and reckoned one of the most valuable in Belgium, was formerly the property of the town. Along with the royal atheneum or high school, it occupies the old abbey of Bandeloo, founded by Baldwin of Constantinople in 1199. The abbey gardens were transformed in 1797 into a botanical garden, which now ranks as one of the finest in Europe. A royal academy for the encouragement of art, founded in 1751 by Charles Marissal, and a musical conservatory originated by the communal council in 1835 are both flourishing institutions; and the technical school with about 800 pupils is one of the very best in Belgium. The Natural History Society, dating from 1851, has established a zoological garden.

Though Ghent has no longer the industrial pre-eminence that it enjoyed in the 14th and 15th centuries, it is still the principal seat of the cotton and leather manufactures of Belgium. Flax-spinning, calico-printing, and sugar-refining are also extensively carried on, and there are engineering works, chemical works, iron-foundries, soap-works, paper-mills, and breweries. No fewer than sixty considerable firms, trading with Germany, France, Italy, and Russia, are engaged in commercial floriculture; and, as a consequence, the flower-shows of Ghent, as they were perhaps the earliest, are still among the finest exhibitions of the kind in Europe. The trade of the town, which deals mainly with the products and raw materials of the industries, is fostered by a good railway system and numerous canals. There is direct communication with the sea by a grand canal, which, however, unfortunately for the Belgians, enters the sea at Terneuse in Dutch territory. The harbour, completed in 1828, is capable of accommodating 400 vessels, and vessels drawing 17 feet of water can unload under the walls of the town. At Saa van Gend, 15 miles north of the city, on the frontier of Holland, there are sluices by which the district can be laid under water.

In 1812 Ghent had no more than 55,161 inhabitants; by 1856 they had increased to 109,668, and by 1869 to 121,469. The census of 1876 gave 127,653. Among the celebrities born in the city are Henry Goethals, distinctively Henry of Ghent, a famous theologian and member of

the Sorbonne (d. 1295); Philippe Mouskes, the chronicler, P. Vanderberghe or Montanus, the geographer; Daniel Heinsius-Jacques van Zevencote, one of the principal Flemish poets; Lauren Delvaux, a sculptor; C. L. Diericx, the local historian; and J. Guislain, the lunacy physician.

The investigations of local antiquaries leave it still doubtful whether Ghent had a Roman origin, as Petrarch supposed (*Gandavum Cæsaris conditora superbum*). That there was a military fortress on the spot in the 7th century, is proved by Baudemont's life of St Amand, the first missionary of Christianity in the district (*Acta Sanctorum* vol. i.). Of the two monasteries founded by the saint in honour of St Peter, the one near the Antwerp gate was richly endowed by St Bavon, and his name became attached, not only to the building, but to the part of the city. About the year 1000 Baldwin Ironarm, first count of Flanders, took possession of Ghent, and a few years after he erected the Gravensteen or Counts' Castle. Trade and manufactures, especially of linen and woollen, were encouraged by Baldwin and his successors, and by the close of the 12th century the men of Ghent were able to purchase commercial and political privileges, and to establish a form of municipal government. They established a court of justice, elected sheriffs, joined the association of the Hanse Towns, and obtained the free navigation of the Rhine from the emperor Frederick I. By the charter of 1192 they obtained the right of fortifying their city, and the first circumvallation carried out between that date and 1214 had a development of 6560 feet. By the end of the 13th century Ghent was a greater city than Paris. In the 14th, under the leadership of the famous Jacob van Artevelde and his son Philip (1332-1382), it raised frequent insurrections against the counts of Flanders, and took a prominent part in the political movements of the Low Countries. In 1385 it was obliged to submit to the duke of Burgundy, but its rights and privileges were left uninjured. At the commencement of the 15th century it had upwards of 40,000 men employed in the woollen manufactures alone, and was able to place in the field from 18,000 to 20,000 men-of-arms. When in 1452 the duke of Burgundy, Philip the Good, imposed a tax on salt and grain, it rose in rebellion, but after a few years' conflict the defeat at Gaveren left it at the duke's mercy. The independence of the burghers was far from being crushed. They showed themselves as turbulent as ever under Mary of Burgundy, who made the city her principal residence; and when she made certain unpopular concessions to Louis XI., they took the law into their hands, and on April 3, 1477, put to death in her presence the two councillors Hugonet and Himbercourt, whom she had intrusted with the mission. After her marriage at Ghent (August 17) with Maximilian of Austria, matters were more peaceful. On Mary's death in 1482 the discontent of the people again broke out. In 1488 they restored their ancient form of government, and held out against the emperor Frederick, who led an army against them in person, but at length in 1492 they came to terms. In 1500 Charles V. was born in the palace at Ghent, the site of which is now occupied by the street called the Cour des Princes. His reign was a critical one for the city, for though it had a population of 175,000, it was but a drop in the bucket of his vast dominions, and he treated it with but little consideration. When in 1536 his sister Maria, at that time in command of the Netherlands, demanded the extraordinary subsidy of 1,200,000 gold florins from Flanders, the citizens refused to contribute, and in 1539 they took arms in self defence. Charles himself appeared on the scene in 1540, forced them to submission, deprived them of their privileges, executed 26 of the principal leaders of the revolt, confiscated the public buildings, and erected a citadel at a total expense of 411,334 livres, the greater part of which had to be defrayed by Ghent itself. Even this did not crush the spirit of the city. It was by the pacification of Ghent, signed in the town-hall Nov. 8, 1578, that Holland and Zealand, and the southern states of the Netherlands, formed an alliance against the Spanish supremacy, and three days after the Spanish garrison capitulated to the citizens. In 1584, however, the duke of Parma captured the town for Philip, and the citadel, which had been almost completely demolished, was restored. The attempts of the French in 1641 and 1642 to get possession of Ghent were frustrated by laying the country under water; but in 1678, though in the meanwhile the fortifications had been considerably extended, the feeble garrison under Don Francisco de Pardo was unable to defend the place against Marshals Hmieres, Luxembourg, Schomberg, and Vauban. Ghent continued in French hands till the peace of Nimwegen. It played an important part in the war of the Spanish succession, being captured in 1706 by Marlborough, recovered in 1708 by the French Marquis de Grimaldi, and again captured by Marlborough in 1709. In the war of the Austrian succession, Louis XX. made his entry into the city on 25th July 1745, and remained in possession till the treaty of Aix-la-Chapelle in 1748. By order of Joseph II. in 1781, the citadel and fortifications were dismantled, and the grounds on which they were built were sold. Under the régime of the French Revolution the city was made the chief town of the department of the Scheldt.

By the peace of Paris (1814) it passed with Belgium to Holland; but it took an active part in the movement for the separation of the two kingdoms, and after the separation was accomplished (1830) continued to be the headquarters of the agitation of the Orange party. On the recommendation of the duke of Wellington, who visited the town in 1821 to give his opinion on the plans, a new citadel was erected according to the designs of M. Gey van Pittius (1822-1830).

See Jean de Thielrode, *Chronique de St Bavon*; Sanderus, *Verheerlykt Vlaenderen*; De Jonghe, *Gedichte Geschiedenis*, 1746; Diericx, *Topographie de l'ancienne ville de Gand* (Ghent, 1808); *Mémoires sur la ville de Gand* (Ghent, 1814-15, 5 vols.); *Mém. sur les lois, &c., des Gantois* (Ghent, 1817-18); *Mém. sur le Droit public de la ville de Gand* (Ghent, 1819); and *Het Gentsch Charterboekje* (Ghent, 1826); Gachard, *Relations des troubles de Gand sous Charles Quint* (Brussels, 1854-5, 3 vols.); P. C. Van der Meersch, *Memorienboek der Stad Ghent* (Ghent, 1853); and "Mémoire sur la ville de Gand considérée comme place de guerre," in *Mémoires Couronnés de l'Acad. royale de Belgique*, tom. xxv., 1831-33 (Brussels, 1854); C. L. Gyselyncx, *Guide de la ville de Gand précédé d'une notice historique*, (Ghent, n. d.).

G H E N T, JODOCUS, or JUSTUS, OF (1465-75). The public records of the city of Ghent have been diligently searched, but in vain, for a clue to the history of Justus or Jodocus, whom Vasari and Guicciardini called Giusto da Guanto. Flemish annalists of the 16th century have enlarged upon the scanty statements of Vasari, and described Jodocus as a pupil of Hubert Van Eyck. But there is no source to which this fable can be traced. The registers of St Luke's guild at Ghent comprise six masters of the name of Jooos or Jodocus who practised at Ghent in the 15th century. But none of the works of these masters have been preserved, and it is impossible to compare their style with that of Giusto. It was between 1465 and 1474 that this artist executed the Communion of the Apostles which Vasari has described, and modern critics now see to the best advantage in the museum of Urbino. It was painted for the brotherhood of Corpus Christi at the bidding of Frederick of Montefeltro, who was introduced into the picture as the companion of Caterino Zeno, a Persian envoy at that time on a mission to the court of Urbino. From this curious production it may be seen that Giusto, far from being a pupil of Hubert Van Eyck, was merely a disciple of a later and less gifted master, who took to Italy some of the peculiarities of his native schools, and forthwith commingled them with those of his adopted country. As a composer and draughtsman Giusto compares unfavourably with the better known painters of Flanders; though his portraits are good, his ideal figures are not remarkable for elevation of type or for subtlety of character and expression. His work is technically on a level with that of Gerard of St John, whose pictures are preserved in the Belvedere at Vienna. Vespasian, a Florentine bookseller who contributed much to form the antiquarian taste of Frederick of Montefeltro, states that this duke sent to the Netherlands for a capable artist to paint a series of "ancient worthies" for a library recently erected in the palace of Urbino. It has been conjectured that the author of these "worthies," which are still in existence at the Louvre and in the Barberini palace at Rome, was Giusto. Yet there are notable divergences between these pictures and the Communion of the Apostles. Still, it is not beyond the range of probability that Giusto should have been able, after a certain time, to temper his Flemish style by studying the masterpieces of Santi and Melozzo, and so to acquire the mixed manner of the Flemings and Italians which these portraits of worthies display. Such an assimilation, if it really took place, might justify the Flemings in the indulgence of a certain pride, considering that Raphael not only admired these worthies, but copied them in the sketch book which is now the ornament of the Venetian Academy. There is no ground for presuming that Giusto da Guanto is identical with Justus d'Allamagna who painted the Annunciation (1451) in the cloisters of Santa Maria di Castello at Genoa. The drawing and colouring of this wall painting shows that Justus d'Allamagna was as surely a native of South Germany as his homonym at Urbino was a born Netherlander.

GHERARDESÇA, UGOLINO DELLA (c. 1220-1289), count of Donoratico and head of the Gherardeschi, one of the leading Ghibelline houses of Pisa, began to take part in public affairs about the time when the dissensions which had arisen about the partition of Sardinia had resulted in sending over the entire clan of the Pisan Visconti to the Guelphs. For having given his sister in marriage to one of these—Giovanni Visconti of Gallura—he was banished from Pisa by his own party, who seem to have had good reason otherwise for suspecting his loyalty; but he was permitted to return in terms of the peace of 1267. Notwithstanding the ambiguous character of his politics, he soon succeeded in gaining a high place in the public service of his native city; and in the battle of Meloria (6th August 1284), which terminated the long war with Genoa, he was one of the three Pisan admirals. It was by his cowardly or traitorous flight at a critical moment, it is said, that the contest was decided in favour of the Genoese; but, be this as it may, whether by means of his treachery, or in spite of it, he almost immediately afterwards (October 1284) was nominated by the citizens who remained to the twofold office of capitano and podestà for one year; and some months afterwards (February 1285) this term was extended to ten years. In this capacity of virtual dictator he, by the banishment of ten leading Ghibelline citizens of Pisa, secured peace with the Florentines; he also endeavoured to propitiate the Genoese by the offer of Castro in Sardinia, and the Lucchese by the actual surrender of Ripafratra and Viarreggio, but unsuccessfully. Meanwhile, though thoroughly alienated from the Ghibellines, he had not succeeded in gaining the confidence of the Guelphs; and in 1287 he was by them compelled to associate with himself in the government Nino Visconti, a nephew by the marriage already referred to, who had now reached manhood. But this arrangement was rendered nugatory by the disagreements of the two colleagues, and Ugolino found it necessary to resign his office in December of the same year. In his unscrupulous ambition after personal ascendancy he now turned for support to the party he had so long deserted, and entered into an alliance with the Gualandi, Sismondi, Lanfranchi, and other uncompromising Ghibellines, who looked upon the archbishop Ruggiero degli Ubal dini as their head. But this unnatural combination soon terminated in an open rupture, the immediate occasion of which was the violence of Ugolino, who, on some sudden provocation, had killed a nephew of the archbishop. In August 1288 he was beset in the Palazzo del Popolo by the Ghibellines, and, after fire had been set to the building, taken prisoner, along with his sons Gaddo and Ugocione, and his grandsons Nino (surnamed Brigatto) and Anselmuccio. (Some accounts mention a third grandson, named Henry.) After having been confined for twenty days in the Palazzo del Comune, they were removed to the Gualandi's Tower, Alle Sette Vie, afterwards called the Torre della Fame. Here they were kept till March 1289, when, by order of the archbishop, the door was locked and the keys thrown into the Arno. Nine days afterwards the tower was re-entered and the bodies removed to the church of San Francisco.

The story of Ugolino, though it is to be met with in other contemporary writers (see Villani, vii. cc. 120, 127), owes all its fame to Dante, who has placed him above Ruggiero on the inner margin of the second division (Antenora) of the ninth and lowest circle of his Inferno. Dante's powerful narrative, which includes "thirty lines unequalled by any other thirty in the whole dominions of poetry" (Lander), has been paraphrased, or rather almost translated, by Chaucer, in the *Monk's Tale*, and has also been reproduced in modern times by Shelley. It ought to be observed, however, with reference to Ugolino's alleged treachery, that the baser explanation of his conduct at Meloria is not to be met with in any document earlier than the 16th century; while with regard to the accusation of having sold the fortresses of Pisa to the Lucchese and Florentines, Dante, though evidently himself believing it, does not say more than that he "was alleged" (aveva voce) to have done so.